

Application No.: 10/672,672

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Docket No.: TOW-044

DEC 28 2006

REMARKS

Applicants amend claims 1, 4, and 5. No new matter is added. Support for the amendment can be found at Page 4, lines 19-22, Page 10, lines 5-19, Page 10, line 25 to Page 11, line 16. Upon entry of this amendment, claims 1-8 are pending, of which claim 1 is independent. Applicants respectfully submit that the pending claims define over the art of record.

Objection to the Title

The title is objected to as being not descriptive. Applicants amend the title to address the Examiner's concern. Applicants respectfully request that the Examiner reconsider and withdraw the objection to the title.

Amendment to the Specification

Applicants amend the specification to correct a typographical error so that the reference numerals in the description of the figures match the figures.

The Claimed Invention

The fuel cell of the present invention includes a filling seal partially provided at positions where leakage of reactant gas is likely to occur. For example, a filling seal is provided partially at an outer region of an electrode and tightly in contact with at least an outer end surface of the electrode to prevent leakage of a reactant gas. As such, the present invention can greatly reduce leakage of the reactant gas without complicating a fuel cell structure. Thus, it is possible to produce the fuel cell of the present invention at a low cost. See Page 4, lines 1-6, Page lines 5-19, Page 10, line 25 to Page 11, line 16.

Claim Rejection Under 35 U.S.C. §102

Claims 1-8 under 35 U.S.C. §102(e) are rejected as being anticipated by United States Patent Application Publication No. 2002/0028370 to Suenaga et al. (hereafter "Suenaga"). Claims 1-8 under 35 U.S.C. §102(a) are further rejected as being anticipated by Japanese Patent Publication No. 2002-231272 to Wakahoi et al. (hereafter "Wakahoi"). Applicants respectfully submit that neither the Suenaga reference nor the Wakahoi reference discloses the limitation of a filling seal provided partially provided *at an outer region of one of the pair of electrodes*, the filling seal being provided *tightly in contact with at least an outer end surface of one of the pair of electrodes* for preventing leakage of the reactant gas, as recited in independent claim 1.

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The Suenaga Reference

The Suenaga reference discloses seals S1 provided in grooves 38, where the seals S1 are in contact with a solid polymer electrolyte film 15 of an electrolyte electrode assembly 12. See Col. 6, paragraph 85. Seals S2 are in contact with an adjacent seal S2 and are provided around peripheries of reactant gas communication holes. See Col. 6, paragraph 85. *Neither seals S1 nor seals S2 are provided at an electrode or in contact with any part of the electrodes of the electrolyte electrode assembly 12. See Figs 2 and 6. In contrast, claim 1 requires a filling seal that is provided partially at an outer region of an electrode, and tightly in contact with at least an outer end surface of the electrode for preventing leakage of said reactant gas.*

Applicants respectfully submit that the Suenaga reference fails to teach each and every element and limitation of claim 1. Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 1.

The Wakahoi reference

The Wakahoi reference discloses seals L provided in grooves 28, where the seals L are in contact with polyelectrolyte film 18 of membrane electrode structure 12. See Fig. 3. Seals S are provided an anode-side separator 16 and a cathode-side separator 14. See Fig. 3. Like the Suenaga reference, neither seals L nor seals S are provided at or in contact with any part of the cathode electrode 20 or the anode electrode 22. See Fig. 3. In contrast, claim 1 requires a filling seal that is provided partially at an outer region of an electrode, and tightly in contact with at least an outer end surface of the electrode for preventing leakage of said reactant gas.

Applicants respectfully submit that the Wakahoi reference fails to teach each and every element and limitation of claim 1. Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claim 1.

Applicants note that the dependent claims also recite patentable subject matter. As such, for this and the reasons set forth above, Applicants respectfully submit that the dependent claims also define over the art of record.

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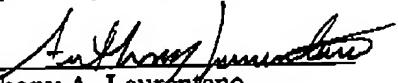
CONCLUSION

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Applicants believe no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. TOW-044 from which the undersigned is authorized to draw.

Dated: December 28, 2006

Respectfully submitted,

By   
Anthony A. Laurenzano  
Registration No. 68,220  
LAHIVE & COCKFIELD, LLP  
One Post Office Square  
Boston, Massachusetts 02109-2127  
(617) 227-7400  
(617) 742-4214 (Fax)  
Attorney For Applicant